# ICERE ICERE Vol. 23 No. 10



**Indian Council of Forestry Research** and Education

Pg. No.

01

02

03

03

04

04

04

05

07

09 09

10

12

12

12

October 2023

### **United Nations Forum on Forests-Country Led Initiatives**

United Nations Forum on Forests-Country Led Initiatives was organized by MoEFCC at ICFRE-FRI, Dehradun from 26 to 28 October 2023. More than 30 countries and 20 organizations across the world participated in the forum.



United Nations Forum on Forests-Country Led Initiatives

### CONTENT

**United Nation Forum on Forest** 

Birth Anniversary of Mahatma Gandhi

**Days Celebrated** 

**Activities peformed under Mission LiFE** 

**Significant Research Findings** 

**Consultancies** 

**Activities under Van Vigyan Kendras** 

**Participation in Exhibition** 

Workshops/Webinars/Seminars/Meetings

**Training Programmes** 

Memorandum of Understanding

**Prakriti Programme** 

**Awareness and Demonstration Programme** 

**Visit to Institutes** 

Rajbhasha Acitivity

Swachhata Campaign

**HR News** 

### • 154<sup>th</sup> Birth Anniversary of Mahatma Gandhi was celebrated by ICFRE, Dehradun and its institutes on 2 October 2023









• **National Unity Day (Rashtriya Ekta Diwas) 2023** to pay tribute to Sardar Vallabhbhai Patel was organized by ICFRE, Dehradun and its institutes on 31 October 2023. All the officers and employees of their respective institutes participated in the programme.











• Vigilance Awareness Week was organized by ICFRE, Dehradun and its institutes from 30 October to 05 November 2023.

















### **Activities performed under Mission LiFE**

### **ICFRE-Arid Forest Research Institute, Jodhpur**

Organized a Children's Cycle Rally programme on 19 October 2023. 50
 children from residential area of ICFRE-AFRI have participated in the programme.



ICFRE-AFRI, Jodhpur organized a Children's Cycle Rally programme

### **ICFRE - Skill Development Centre Chhindwara**

 Organized a bird watching campaign for 70 school students on 4 October 2023 and exposure of various plant species were also given to the students.

### **ICFRE-Institute of Forest Biodiversity, Hyderabad**

 Organized an awareness programme about millets inclusion in diet through mid-day meal on 06 October 2023. 70 students of Vvyasa School, Bowrampet, Hyderabad participated in the programme.



ICFRE-AFRI, Jodhpur organized an awareness programme about millets inclusion in diet through mid-day meal

### **ICFRE-Forest Research Institute, Dehradun**

 Organized a programme on sustainable utilization of bio resources on 20 October 2023. 60 students of Class 11<sup>th</sup> and 12<sup>th</sup> along with the faculty members from Shivalik Academy participated in the programme.

### **Significant Research Findings**

### **ICFRE-Forest Research Institute, Dehradun**

Metabolomic analysis was conducted using UPLC-QTOF-MS on 25% aqueous methanol extracts from *Prinsepia utilis* leaves collected from 14 different locations in Uttarakhand and Himachal Pradesh. This study, combined with chemometric analysis, led to the identification of 80 compounds and their interpopulation variability. This finding highlights the rich phytochemical diversity of *P. utilis* leaves. Among these, 57 were marker compounds, mostly phenolic compounds, with 56 of them being previously unreported. Notably, the most abundant marker compounds included malic acid, Kaempferol 3-(2rhamnosylrutinoside), isorhamnetin 3-rutinoside 4-rhamnoside, clovin, kaempferol 3-sophorotrioside 7-rhamnoside, kaempferol 3sophoroside 7-glucoside, and quercetin 3-[rhamnosyl-(1->2)rhamnosyl-(1->6)-glucoside]. The discovery of 57 marker compounds, especially phenolic compounds, provides essential information for the characterization and quality control of P. utilis leaves. These marker compounds can serve as chemical fingerprints for the plant, aiding in its authentication and standardization.

### **ICFRE-Institute of Forest Biodiversity, Hyderabad**

• The virome of Neolamarckia cadamba was explored using the publicaly available cadamba transcriptome datasets and a putative novel virus, tentatively named as cadamba cryptic virus 1 (CdbCV1), was identified. CdbCV1 contained two genome segments, each coding for a single protein, CdbCV1 RNA 1 (1564 nt) encoded for an RNA dependent RNA polymerase (RdRp) protein while CdbCV1 RNA2 (1492 nt) encoded for a protein (CP). Phylogenetic and sequence similarity analyses revealed the relatedness of CdbCV1 to pepper cryptic virus 1 and pittosporum cryptic virus. Based on the species demarcation criteria, genome organization and phylogeny, CdbCV1 can be regarded as a new member of the genus Deltapartitiviurs (Sidharthan et al., 2023).

# ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore

 A unique, highly expressed Peroxidase-2 gene, which is induced during salt stress, was identified from Rhizphora mucronata and cloned into genetic transformation vector for gene function validation studies.

### ICFRE-Himalayan Forest Research Institute, Shimla

Pradesh India to investigate the field growth performance of male and female genotypes of *Populus ciliata* provenances viz., Khanola, Pahnala, Nashala, Solangnala and Gaganshil. The trial was established in a RBD with three replications in high hill temperate region of Himachal Himalayas. Maximum GBH (56.01 cm) was observed for Khanola provenance, however highest total height (19.04 m) and clean bole height (6.34 m) were recorded for Gaganshil provenance. Solangnala provenance demonstrated largest crown width (5.60 m) and survival percentage (75.00%).

### **ICFRE-Tropical Forest Research Institute, Jabalpur**

- Suitability of planted tree species on Chambal ravines along with biofertilizers and mulching treatments was assessed.
   Azadirachta indica and Acacia tortilis performed the best as per survival and growth characteristics.
- For establishment of gene bank of different FGR species at KVK, Piparondh, Katni, plantlets of Haldina cordifolia, Syzygium cumini, Alianthus exelsa, Litsea glutinisa and Careya arborea were planted.
- Plantation of critically endangered species Dillenia pentagyna and Saraca asoca was carried out in NWFP nursery of TFRI under a MPSFD sponsored project for its ex-situ conservation.

### **Consultancies**

### **Indian Council of Forestry Research and Education, Dehradun**

Works on different scientific consultancy projects was undertaken and following reports were submitted to respective agencies during the period:

### **Reports Submitted:**

Final Environmental Audit Reports of KD Hesalong, Parej, Rajarappa OCPs, CCL submitted to CIL, Kolkata.

### **New Proposal submitted:**

- Proposal for Preperation of R&R Plan for Jaisinghpura North Iron Ore Block of M/s. JSW Steel Limited, Bellary, Karnataka and providing technical advice for its implementation and assessment of biodiversity of restored areas submitted to M/s. JSW Steel Limited.
- **2.** Proposal w.r.t. ecological assessment of the river/streams passing through the mine lease area of chandragupt open cast

coal mine with monitoring of flora and fauna mainly dependent on the streams submitted to CCL, Ranchi.

### **ICFRE-Rain Forest Research Institute, Jorhat**

 Assessment of Bamboo Resources in the state of Assam funded by North Eastern Development Finance Corporation Limited (NEDFi) under Techno Economic Development Fund (TEDF), Ministry of Home Affairs (North East Division), Government of India.

### Activities under Van Vigyan Kendras

 ICFRE- IFB, Hyderabad organized a training programme on Importance of Honeybees and its role in Biodiversity conservation on 19 October 2023. A total of 70 BSc-Agricultural Students from Malla Reddy University, Hyderabad participated in the programme.



ICFRE-HFRI Shimla installed a stall in the Exhibition of Flying Shimla Fair

### **Participation in Exhibition**

 ICFRE-HFRI Shimla installed a stall in the Exhibition of Flying Shimla Fair at Glide Inn Junga, Shimla on 12 and 13 October 2023. Technologies and products developed by the institute and extension material were also displayed in the stall.



ICFRE-HFRI Shimla installed a stall in the Exhibition of Flying Shimla Fair



• **Research Advisory Group (RAG)** Meetings 2023 were conducted by ICFRE-IFGTB, Coimbatore, ICFRE-HFRI, Shimla, ICFRE-IFB, Hyderabad and ICFRE-RFRI, Jorhat.









## **Workshops/Seminars/Webinars/Meetings**

### ICFRE-Forest Research Institute,, Dehradun

 Seminar on Soil Nutrient depletion and its Replenishment 12 October 2023

50 participants including Heads of Divisions of FRI, officers and scientists of FRI, students of FRI deemed university, PhD scholars and project officials

2. Webinar on Bioinoculants for plant growth enhancement and disease resistance

19 October 2023

65 participants including Scientists, Researchers and students of ICFRE-FRI, Dehradun



 Workshop on Screening and production of quality raw material for Indian Pulp, Paper and Panel Industry 20 October 2023

80 participants including Pulp, Paper and Panel Industry, CPPRI, Saharanpur, scientists and researchers of ICFRE-FRI, Dehradun



ICFRE-FRI, Dehradun conducted a seminar on Soil Nutrient depletion and its Replenishment



ICFRE-FRI, Dehradun conducted a Webinar on Bioinoculants for plant growth enhancement and disease resistance

### ICFRE-Institute of Wood Science and Technology, Bengaluru

4.	Meeting on utilization of printed currency	09 October 2023	07 members of Panel industry sector
	note trim wastes for value addition		

5. 4<sup>th</sup> Meeting of Technical Committee II under National Bamboo Mission

26 October 2023

Bamboo related industries, NGOs, entrepreneurs, Mutha Industries, Bio Craft innovations, ITC, Uravu, Bamboo Pecker, NID Bengaluru, BCDI Agartala

### ICFRE-Himalayan Forest Research Institute, Shimla

6. Seminar on Studies on genetic improvement of poplars in the North Western Himalaya: current status and future prospects

31 October 2023

45 participants including Scientists, Technical staff and Research staff

### **ICFRE- Rain Forest Research Institute, Jorhat**

7. Workshop on Impact of FCA Amendments on Development of North East and People's Right

06 October 2023

100 participants including officers from Forest Departments of North East States, Scientists, Officers of RFRI, Jorhat, Environmentalist and NGO members



8. Workshop on Eco-tourism Feasibility Study in Intanki National Park to promote tourism, livelihood improvement and biodiversity conservation

07 October 2023

50 participants from Nagaland Forest Department, NGOs, Community based Organizations, Village Council and Academicians





ICFRE-RFRI, Jorhat conducted a workshop on Ecotourism feasibility study in Intanki NP

# Development of North East and People's Right

### **Training Programmes**

### **ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore**

 Multilocation trial (MLT) Data analysis under Eucalyptus Improvement (AICRP-4) and Casuarina Improvement (AICRP-1)

03 to 07 October 2023

12 Scientists of ICFRE-IFGTB

### **ICFRE- Tropical Forest Research Institute, Jabalpur**

2. Divisional orientation cum training programme

16 to 27 October 2023

04 newly inducted scientists of ICFRE-TFRI, Jabalpur

### ICFRE-Institute of Forest Biodiversity, Hyderabad

3. Methods for documentation of biological diversity

04 to 06 October 2023

30 students



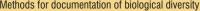
### **ICFRE-Arid Forest Research Institute, Jodhpur**

Greening of Arid areas and Sensitization on 4. **Ecological Aspect and Sustainable Forestry of** Dry Areas

04 to 06 October 2023

30 participants including NGOs, Environmentalists and progressive farmers







Greening of Arid areas and Sensitization on Ecological Aspect and Sustainable Forestry of Dry Areas

## ICFRE-Institute of Wood Science and Technology, Bengaluru

5.	Bamboo cultivation, management, seasoning, preservation and utilization	04 and 06 October 2023	50 farmers each
6.	Advances in Wood Production and Utilization	09 October 2023	13 In-service IFS officers
7.	Plywood Manufacturing-II (Adhesive for Plywood and Plywood manufacturing- Resin Preparation, Gluing, Hot Pressing	11 to 12 October 2023	11 Industry personnel
8.	Manufacutering of Fire Retardant Door (FRD) shutter for 120 mins rating through construction method	16 to 19 October 2023	05 Industry personnel



### **Memorandum of Understanding**

- An MoU was signed between ICFRE-IWST, Bengaluru and NCBS, Bengaluru on 05 October 2023 to collaborate research on forest management, biodiversity conservation & value addition of wood and wood products.
- An MoU was signed between ICFRE, Dehradun and CSIR-NEERI by Director CSIR-NEERI, Dr. Atul N Vaidya and Director General, ICFRE, Sh. Bharat Jyoti on 30 October 2023.



MoU signed between ICFRE-IWST, Bengaluru and NCBS, Bengaluru

 ICFRE-LEC, Agartala signed an MoU with General Manager, NABARD, Agartala on 13 October, 2023 to conduct skill development training on bamboo shoot processing and value addition for the people of Tripura.



MoU signed between ICFRE, Dehradun and CSIR-NEERI

### **Prakriti Programme**

# ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore

About 487 school students of Ramasamy Chettiar Government Girls Higher Secondary School, Coimbatore, Navy Children School, Anan International School, Coimbatore, SNS Academy, Coimbatore, Veveham School, Coimbatore, Adwaith Thought Academy, Coimbatore and Viveham Higher Secondary School, Dharapuram visited ICFRE-IFGTB, Coimbatore on 04, 11, 17, 19, and 26 October 2023 respectively and lectures on Biodegradable waste, Microirrigation, Food chain and Afforestation were delivered to the students.



Students from various schools visited ICFRE-IFGTB, Coimbatore



### **ICFRE-Institute of Forest Biodiversity, Hyderabad**

 40 students of Kendriya Vidyalaya, Dundigal No-2, Telangana along with the teachers visited ICFRE-IFB, Hyderabad on 31 October 2023 and a lecture on Sustainable development was also delivered to the students.

### **ICFRE-Institute of Wood Science and Technology, Bengaluru**

 31 Students of Grade V and VI along with 03 teachers from Valiants Academy, Kanakapura Road, Bangalore visited ICFRE-IWST, Bengaluru on 11 October 2023.



Students of Grade V and VI along with 03 teachers from Valiants Academy, Kanakapura Road, Bangalore visited ICFRE-IWST, Bengaluru

### **ICFRE-Tropical Forest Research Institute, Jabalpur**

 110 students of Class 9<sup>th</sup> and 10<sup>th</sup> from Kendriya Vidyalaya No.1 GCF, Jabalpur, M.P. visited ICFRE-TFRI, Jabalpur on 12 October 2023.



Students of Class 9<sup>th</sup> and 10<sup>th</sup> from Kendriya Vidyalaya No.1 GCF, Jabalpur, M.P. visited ICFRE-TFRI, Jabalpur

 100 students of Class 9<sup>th</sup> and 12<sup>th</sup> from St. Joseph convent school, TFRI branch, Jabalpur(MP). visited ICFRE-TFRI, Jabalpur on 13 October 2023

### **Awareness and Demonstration Programme**

# ICFRE-Institute of Forest Genetics and Tree Breeding, Coimbatore

- 68 M.Sc Botany students from Department of Botany, Annamalai University, Chidambaram visited ICFRE-IFGTB, Coimbatore on 03 October 2023.
- 45 M.Sc Forestry students from Forest Research Institute, Dehradun visited ICFRE-IFGTB, Coimbatore on 06 October 2023 and a lecture on Seed Technology was delivered to the students.
- 24 UG Botany students from Department of Botany, MES Ponnani College, Kerala, visited ICFRE-IFGTB, Coimbatore on 11 October 2023.



UG Botany students from Department of Botany, MES Ponnani College, Kerala, visited ICFRE-IFGTB, Coimbatore

- Conducted a lecture on Carbon Sequestration in Plantations on 12 October 2023 for forest officials of Tamil Nadu Forest Academy and field staff.
- 15 UG Botany students from University of Kerala, Trivandrum visited ICFRE-IFGTB, Coimbatore on 17 October 2023.
- 100 UG Botany students from NGM College, Pollachi visited ICFRE-IFGTB, Coimbatore on 20 October 2023.
- 20 Botany students from, B.K. College, Amalagiri, Kottayam, Kerala visited ICFRE-IFGTB, Coimbatore on 25 October 2023.

### ICFRE-Institute of Wood Science and Technology, Bengaluru

 45 Students of M.Sc Forestry along with faculties from FRI Deemed to be University, Dehradun visited ICFRE-IWST, Bengaluru on 05 October 2023.

 37 Students of M.Sc Environmental Science along with faculties from FRI Deemed to be University, Dehradun visited ICFRE-IWST, Bengaluru on 18 October 2023.



Students of M.Sc Environmental Science along with faculties from FRI Deemed to be University, Dehradun visited ICFRE-IWST, Bengaluru

- 54 students of B.Sc. (Hons.) Forestry of Forest College and Research Institute, Tamil Nadu Agricultural University, Mettupalayamalong with faculty visited ICFRE-IWST, Bengaluru on 19 October 2023.
- 38 Students of M.Sc Wood Science and Technology with faculties from FRI Deemed to be University, Dehradun visited ICFRE-IWST, Bengaluru on 25 October 2023.

### **ICFRE-Rain Forest Research Institute, Jorhat**

 Organized Research and development activities on Bamboo Cultivation, Propagation, Nursery Management, Value addition & bamboo preservation techniques, Biotechnology and Tissue Culture, identification of wild edible Mushroom, Lac Cultivation, Vermicomposting and Agar plantation on 31 October 2023 for 29 Botany (Honours) Students from Srikishan Sarda College, Hailakandi.



Botany (Honours) Students from Srikishan Sarda College, Hailakandi visited ICFRE-RFRI, Jorhat

### **ICFRE-Tropical Forest Research Institute, Jabalpur**

- 27 Narmada Samagra NGOs workshop trainees, Madhya Pradesh visited ICFRE-TFRI, Jabalpur on 10 October 2023 and a lecture on Sustainable harvesting and processing of NTFPs was delivered to them.
- 43 Government Shyam Sundar Agrawal PG College, Sihora students visited ICFRE-TFRI, Jabalpur on 11 October 2023.

### **ICFRE-Arid Forest Research Institute, Jodhpur**

 A group of 56 Forester Trainees of Forest Department, Jodhpur visited ICFRE-AFRI, Jodhpur on 26 October 2023 and a documentary on ICFRE-AFRI, Jodhpur was shown to the them.



Forester Trainees of Forest Department, Jodhpur visited ICFRE-AFRI, Jodhpur

### **Visit to Institutes**

 A group of representatives from various Perfumery Industries of France consisting of Ms. Magali Quenet, Ms. Nora Gasparini, Ms. Catherine Behar, Mr. Bostroem Jean, and Ms. Lise Brethous Parnentier visited ICFRE-RFRI, Jorhat on 30 October 2023.



A group of representatives from various Perfumery Industries of France visited ICFRE-RFRI, Jorhat



### **Rajbhasha Activity**

ICFRE, Dehradun conducted a Special Hindi Workshop on 18
 October 2023 for the officers & staff related to Hindi of the
 Headquarters and all the ICFRE institutes under the title
 Inspection Questionnaire.



ICFRE, Dehradun conducted a Special Hindi Workshop

### **Swachhata Campaign**

- ICFRE-HFRI, Shimla conducted Swachhta Campaign in every week of October in and around the Campus. About 100 employees of ICFRE-HFRI, Shimla including Director, Scientists, Officers, Officials and Research Scholars actively participated in the event.
- ICFRE-IFB, Hyderabad conducted Cleaning programme in every week of October as part of Special Swachhata Campaign 3.0.



ICFRE-IFB, Hyderabad conducted cleanliness programme

 ICFRE-CEC, Vishkapatanam conducted Cleanliness drive in every week of October as part of Special Swachhata Campaign 3.0.  ICFRE-IFP, Ranchi conducted a cleanliness drive under special Swachhata Campaign 3.0 in every week of October outside the campus of the institute. All the officers, officials and research fellows participated in the cleanliness campaign.



Forester Trainees of Forest Department, Jodhpur visited ICFRE-AFRI, Jodhpur

- ICFRE-RFRI, Jorhat conducted a cleanliness drive under Special Swachhata Campaign 3.0 in every week of October.
   50 employees of the institute participated in the drive.
- ICFRE-LEC, Agartala conducted a cleanliness drive under Special Swachhata Campaign 3.0 in every week of October.
   10 employees of the institute participated in the drive.
- ICFRE-BRC, Aizawl conducted a cleanliness drive under Special Swachhata Campaign 3.0 in every week of October. 10 employees of the institute participated in the drive.

### **HR News**

Sh. Sharat Kothari, Scientist-B

ICFRE-AFRI, Jodhpur

Retirement	
Name of Officer	Date
Dr. M. Sujata, CTO ICFRE- IWST, Bengaluru	31.10.2023
Sh. Surender Singh Negi , RFO	31.10.2023
ICFRE-FRI, Dehradun	
Smt. T.S. Lalitha, P.S., ICFRE-IWST, Bengaluru	31.10.2023
Appointment Regular	
Name of Officer	Date

04.10.2023



Ms. Mitali Mehta, Scientist-B 10.10.2023

ICFRE-RFRI, Jorhat

Sh. Anshuman Patel, Scientist-B 11.10.2023

ICFRE-RFRI, Jorhat

Sh. Amitava Roy, Scientist-B 11.10.2023

ICFRE-RFRI, Jorhat

**Appointment on deputation** 

Name of Officer Date

Sh. Mota Ram, AAO, 05.10.2023

ICFRE-AFRI, Jodhpur

**Promotion** 

Name of Officer Date

Sh. A. Balasubramanian, Research Officer-1 03.10.2023

Promoted to the post of Scientist -B

### Patron:

Smt. Kanchan Devi, IFS, Director General, ICFRE, Dehradun

### **Editorial Board:**

Dr. Sudhir Kumar, DDG(Extn.), Chairman

Dr. Geeta Joshi, ADG (M&Extn.), Honorary Editor

Dr. Vishwajeet Sharma, STO, (M&Extn.), Member

### **Technical Assistance:**

Mr. Prince, Technical Assistant, (M&Extn.)

### Disclaimer

- Published for private circulation only.
- The content in the Newsletter do not necessarily reflect the views of the Editorial Board.
- ICFRE is not responsible for any loss or damage, whatsoever may be due to the information published here.